

Application Serial No. 10/620,912

Patent
Docket No. NET-007 US (7033282001)REMARKS

Amendments to claims 1 and 75 are for the purpose of clarifying what Applicant regards as the invention. No new matter has been added.

I. CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1, 4-7, 14, 15, 22, 23, 26, 36-37, 43-48, and 73-78 stand rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,577,863 (Bourlas). Applicant respectfully notes that in order to sustain a claim rejection under § 102, each of the claimed elements must be disclosed, either expressly or inherently, in the cited reference.

Claim 1

Claim 1 has been amended to recite detecting a call from a first voice-band modem to a second voice-band modem over a wireless voice channel, wherein the voice-band modem comprises a V.32 modem, a V.32b model, a V.34 modem, a V.34b modem, or a V.90 modem (Emphasis Added). Bourlas also does not disclose or suggest such limitations. Rather, Bourlas disclose a base station 104 having a modem interface card (MIC) 128 (figures 1, 2). The MIC 128 is configured to transmit "data" so that data can be "shared" between customers and businesses, as in the "Internet" (column 3, lines 52-55). Bourlas does not disclose or suggest that such MIC 128 is a voice-band modem. For the sake of argument, even assuming that the MIC 128 is a voice-band modem (which is not disclosed in Bourlas), Bourlas does not disclose or suggest that such a modem comprises a V.32 modem, a V.32b model, a V.34 modem, a V.34b modem, or a V.90 modem. Applicant respectfully submits that a disclosure of the MIC 128 does not necessitate a finding that any of the

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modems recited in claim 1 is disclosed. For at least the foregoing reasons, claim 1 and its dependent claims are believed allowable over Bourlas.

Applicant also respectfully submits that claim 1 and its dependent claims are allowable over Bourlas for the additional reason that Bourlas does not disclose or suggest detecting a call from a first voice-band modem to a second voice-band modem over a wireless *voice channel* (Emphasis Added). To the extent that the Examiner considers the MIC 128 at the base station 104 to be the claimed voice-band modem, Applicant respectfully notes that Bourlas discloses that the base stations 104 communicate with each other using a backhaul 116, such as "a fiber-optic cable, a microwave link, or other high throughput connection" (column 3, lines 51-65; figure 1), none of which is disclosed in Bourlas as a wireless voice channel. As such, Bourlas does not disclose or suggest detecting a call between two voice-band modems over a wireless voice channel.

Claim 75

Claim 75 has been amended to recite a wireless broadband channel having a near end and a far end, a first voice-band modem linked to the near end of the wireless broadband channel, wherein the first voice-band modem comprises a V.32 modem, a V.32b model, a V.34 modem, a V.34b modem, or a V.90 modem; and a second voice-band modem linked to the far end of the wireless broadband channel. As similarly discussed with reference to claim 1, Bourlas does not disclose or suggest these limitations. As such, claim 75 and its dependent claims are believed allowable over Bourlas.

Claim 22

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Claim 22 recites a third modem located at the near end of the wireless voice and broadband channels and configured for, *in response to a detection of a modem call over the wireless voice channel*, establishing a connection with the first modem, receiving data from the first modem over the connection, and demodulating the received data (Emphasis Added). Bourlas does not disclose or suggest such third modem. Rather, Bourlas discloses a standby MIC 109, which is a part of a redundancy system that is configured to take over transmission of data *in response to detecting a failure of an outdoor unit (ODU) 108* (Abstract, column 2, lines 24-49, column 5, lines 39-53), and not in response to detecting a modem call, as recited in claim 22. For at least the foregoing reason, claim 22 and its dependent claims are believed allowable over Bourlas.

Claim 22 also recites a wireless voice channel, and a wireless broadband channel, a first modem linked to a near end of the wireless voice and broadband channels, and a second modem linked to a far end of the wireless voice and broadband channels. To the extent that the Examiner considers the MIC 128 to be the claimed modem, Applicant respectfully notes that the MIC 128 (which is a part of the base station 104) communicates with another MIC 128 using a backhaul 116, such as "a fiber-optic cable, a microwave link, or other high throughput connection" (column 3, lines 51-65; figure 1). There is nothing in Bourlas that discloses or suggests that such backhaul 116 has two channels, much less, a wireless voice channel and a wireless broadband channel. For this additional reason, claim 22 and its dependent claims are believed allowable over Bourlas.

II. CLAIM REJECTIONS UNDER 35 U.S.C. § 103

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Claims 50-72 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bourlas in view of U.S. Patent No. 6,850,512 (Bishop).

Claim 50 recites determining a data transfer rate of the detected modem call, and comparing the data transfer rate to a bandwidth of the wireless voice channel. Claim 65 recites similar limitations. According to the Office Action, column 5, lines 39-53 of Bourlas allegedly disclose determining a data transfer rate of the detected modem call. However, the cited passage actually discloses:

However, as shown in FIG. 2, each one of the plurality of sODU's 111(a-d) is configured to functionally replace one ODU 108, whereby a one-to-one correlation between a failed ODU 108 and the sODU 111 is maintained. In embodiments where the redundancy system 107 comprises multiple sMICs 109 and their associated plurality of sODUs 111(a-n), multiple levels of redundancy are achieved. The redundancy system 107 will replace both a failed MIC 128(a) and its ODU 108(a) or a failed ODU 108(a) and its MIC 128(a). For example, if the ODU 108(a) failed, the sODU 111(a) along with the sMIC 109 would come on line to replace the failed ODU 108(a) and its MIC 128(a). Therefore, though only four ODU's and sODU's are depicted, in this example, it should be recognized that the number would vary depending on system requirements.

As such, the cited passage describes using MIC 109 to replace a failed ODU 108, and does not disclose or suggest determining a data transfer rate of a modem call. Bishop also does not disclose or suggest the above limitation, and therefore, fails to make up the deficiency presents in Bourlas. For at least the foregoing reason, claims 50 and 65, and their respective dependent claims, are believed allowable over Bourlas, Bishop, and their combination.

Also, with respect to the limitation of comparing the data transfer rate to a bandwidth of the wireless voice channel, Applicant agrees with the Examiner that Bourlas does not disclose or

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suggest this limitation. According to the Office Action, "Olafsson" (Applicant believes that the Examiner meant "Bishop") allegedly discloses the above limitation, citing column 1, lines 24-45.

However, the cited passage of Bishop actually discloses:

Part of the inefficiencies in mating wireless and network communications is due to their inherent architectures. For example, the protocols used for connecting computers over hardwired links do not easily lend themselves to efficient transmission over standard wireless links, which have been designed for voice grade communications requiring continuous but relatively slow data transfer rates.

Cellular networks were originally designed to provide voice grade communications, which typically require only a 3 Kiloherz bandwidth. Based on these techniques, the low frequency channels employed for voice communication are generally limited to a digital baud rate of 9.6 kilobits per second (kbps), which is slow compared to transfer rates such as 56.6 kbps that are now commonly available in inexpensive wire-line modems. Notably, the reception of a sophisticated web page at a client computer based on wireless voice grade channels is slow compared to the speed of a tethered modem connection to a hardwired telephone link. In short, it is similarly difficult to receive, or transfer for that matter, any large files over standard voice based telephone systems.

As such, the cited passage of Bishop describes that the transfer rate of low frequency channels is slower than the transfer rate in wire-line modems. There is nothing in the cited passage that discloses or suggests a method that includes the step of comparing the data transfer rate to a bandwidth of the wireless voice channel, nor does it disclose or suggest a processor configured for comparing the data transfer rate to a bandwidth of the wireless voice channel. For these additional reasons, claims 50 and 65, and their respective dependent claims, are believed allowable over Bourlas, Bishop, and their combination.

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Conclusion

Based on the foregoing, it is believed that all claims are now allowable and a Notice of Allowance is respectfully requested. If the Examiner has any questions or comments regarding this amendment, the Examiner is respectfully requested to contact the undersigned at (650) 849-4400.

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